

[00144] Abstract of the Invention

[00145] A surgical instrument for laparoscopic and endoscopic clinical procedures simultaneously severs and staples tissue clamped in an end effector comprising an elongate channel, which holds a staple cartridge, and a pivotally attached anvil. An E-beam firing bar engages the channel and selectively engages the anvil during distal firing movements, wherein the tissue is severed and stapled driven upward from the staple cartridge to form against the anvil. In particular, a wedge integral to the staple cartridge is driven distally by a middle pin of the firing bar to effect stapling. A single lockout of the elongate channel responds to the presence of the wedge sled in its unfired position to allow the firing bar to fire. Otherwise, the single lockout prevents firing when the staple cartridge is missing or spent.